



1986

## A Survey of Changes in Teacher Preservice: Five Years After Implementation of Illinois HB 150

Randal L. Becker  
*Loyola University Chicago*

Follow this and additional works at: [https://ecommons.luc.edu/luc\\_diss](https://ecommons.luc.edu/luc_diss)



Part of the [Education Commons](#)

---

### Recommended Citation

Becker, Randal L., "A Survey of Changes in Teacher Preservice: Five Years After Implementation of Illinois HB 150" (1986). *Dissertations*. 2449.

[https://ecommons.luc.edu/luc\\_diss/2449](https://ecommons.luc.edu/luc_diss/2449)

This Dissertation is brought to you for free and open access by the Theses and Dissertations at Loyola eCommons. It has been accepted for inclusion in Dissertations by an authorized administrator of Loyola eCommons. For more information, please contact [ecommons@luc.edu](mailto:ecommons@luc.edu).



This work is licensed under a [Creative Commons Attribution-NonCommercial-No Derivative Works 3.0 License](#).  
Copyright © 1986 Randal L. Becker

A SURVEY OF CHANGES IN TEACHER PRESERVICE: FIVE YEARS

AFTER IMPLEMENTATION OF ILLINOIS HB 150

by

Randal L. Becker

A Dissertation Submitted to the Faculty of the School of Education  
of Loyola University of Chicago in Partial Fulfillment  
of the Requirements for the Degree of  
Doctor of Education

May

1986

## ABSTRACT

### A SURVEY OF CHANGES IN TEACHER PRESERVICE:

### FIVE YEARS AFTER IMPLEMENTATION OF ILLINOIS HB 150

The purpose of this study was to examine the impact of the House Bill 150 regulations on the teaching of mainstreamed handicapped students at the elementary level. Specifically examined was the extent to which teachers perceived that their training program prepared them to effectively teach mainstreamed students in their classroom. A second factor examined was the type of program used at training facilities to meet the intent of HB 150 in their teacher training program.

Data with respect to the types of programs offered were collected through a survey of program directors at colleges. These individuals were asked to describe the program they used to meet the house bill regulations. The effectiveness of the training which the teachers received was also determined through a survey. Teachers were asked to identify the strengths and weaknesses of the training they received regarding the teaching of mainstreamed handicapped students.

### MAJOR FINDINGS OF THIS STUDY INCLUDE:

1. The colleges indicated that the most used training program included a single specifically designed course on special education needs and methods.
2. The majority of teachers felt that they received information on the program needs of mainstreamed handicapped students through a single course model.
3. Teachers felt that the most effective approach for teacher training would be one which combined a single course with special education information infused into most of the methods courses in their program.

Submitted by:

Randal L. Becker

Ed.D. Candidate

## ACKNOWLEDGEMENTS

A special thanks goes to my committee members: Drs. Berlin, Miller, and Smith for their guidance and assistance during the preparation of this dissertation. Further acknowledgements must go to the faculty and administration at Concordia College for their understanding and teaching load adjustments which allowed me to complete the process. The computer services personnel at the Illinois State Board of Education and at Concordia College both assisted greatly in the data collection and preparation of the final document.

Several special recognitions need to be given: first to the members of the Higher Education Advisory Council for their help in the standardization procedure of the surveys used, and also to all of the teachers who answered and returned those surveys. Secondly, a special recognition for her invaluable assistance on this project must go to Mrs. Marion Dodd who willingly shared the information relating to the development of the original HB 150 legislation.

A final very special acknowledgement of appreciation must go to my family members: Ellen, my wife, without whose help none of the process could have been completed; my children: Margaret and David, for their patience when dad was not available to them and to their needs.

## VITA

The author, Randal L. Becker, is the son of Melvin Louis Becker and Lois Mae (Heaton) Becker. He was born August 11, 1944, in Pekin, Illinois, where he lived until the age of eighteen.

Mr. Becker completed his schooling in the Pekin, Illinois, public schools, graduating in 1962. He first entered Illinois State Normal University at Normal, Illinois, in 1962, completing three semesters in the Special Education--Physical Therapy major. He left ISU and moved to Elkhart, Indiana, where he completed requirements for an X-Ray Technician's Certificate at the Elkhart Institute of Technology. He worked as an X-Ray and Laboratory Technician until 1968, when he returned to Illinois State University to complete his bachelor's degree in education (1971), majoring in Speech Pathology and Audiology.

His master's degree in Special Education (Learning Disabilities and Social/Emotional Disorders) and Special Education Administration was conferred by Illinois State University (1974). Mr. Becker was a speech therapist, then a Learning Disabilities Consultant (Supervisor) in Illinois schools prior to becoming the Director of Pupil Personnel Services for an elementary school district in a Chicago

suburb. He was an adjunct faculty member for National College of Education, Evanston, IL, and accepted a faculty position at Concordia College, River Forest, IL, (1981). A co-founder of the Illinois Division for Children with Learning Disabilities (1976), he served as second president.

Mr. Becker co-authored a study with Dr. M. A. Freeman, "An Analysis of Teacher Perceptions: Competencies for Teachers of Learning Disabled Children and Youth" (Learning Disability Quarterly, 1979, Winter). They presented their findings at the National CEC Convention (1979), at Dallas, TX. He has done teacher inservice on the Teacher Assistance Team Concept (developed by Chalfant, Pysh, and Moultrie) as well as on other topics. He served on an Illinois State Board of Education Task Force to develop the Learning Disabilities Manual: Recommended Procedures and Practices (1978, May), and has served on the Higher Education Advisory Committee of the Illinois State Board of Education since 1981. He is a member of the Special Education Committee for the Northern Illinois District, Lutheran Church (Missouri Synod).

Mr. Becker developed a special education teacher training curriculum for Concordia College, which was approved (June 15, 1984) by the Teacher Certification Board of Illinois. As Director of Special Education for Concordia College, he supervises student's Clinical Practicum experiences in addition to regular teaching duties.

## LIST OF TABLES

Table	Page
1. Analysis of Respondents by Categories . . . . .	40
3. Sufficiency of Information . . . . .	45
3/4. Comparison of Responses to Questions 3 and 4 . . . . .	47
Applicability of Information in Respondent's Classroom	
5-1. Percentage Grouped by Response . . . . .	50
5-2. Number of Responses Separated by Program Type. . . . .	50
5-3. 'Yes' Responses Separated by Program Type. . . . .	50
5-4. 'No' Responses Separated by Program Type . . . . .	50
5-5. 'Unsure' Responses Separated by Program Type . . . . .	51
3/4/5. Comparison of Questions 3, 4, and 5 Responses Separated by Response and Grouped by Program Type. . . . .	53
3/6. Comparison of Sufficiency of Information Received and Perceived Ability to Locate Commercially Produced Materials. . . . .	56
Ability to Locate Commercially Produced Materials	
6-1. Percentage Grouped by Response . . . . .	57
6-2. 'Yes' Responses Separated by Type . . . . .	57
6-3. 'No' Responses Separated by Type . . . . .	58
6-4. 'Unsure' Responses Separated by Type . . . . .	58
5/6. Comparison of Applicability of Information Learned and Ability to Find Commercially Produced Materials for Classroom Use . . . . .	58
Comparison of Teacher Perceptions: Can Mainstreamed Students be taught in Regular Classrooms with Modification Techniques Learned?	
7-1. 'Yes' Responses Separated by Type . . . . .	60

7-2.	'No' Responses Separated by Type . . . . .	60
7-3.	'Unsure' Responses Separated by Type . . . . .	60
8.	Teacher Perceptions of Benefits for Mainstreamed Students If Teacher Has Been Properly Trained . . . . .	61
9.	Single Course Service Delivery Model Responses Separated by Type. . . . .	63
10.	Infusion Model Service Delivery Model Responses Separated by Type. . . . .	63
	Analysis of Single Course Preferences	
9-1.	Percentage Grouped by Response . . . . .	64
9-2.	'Yes' Responses Separated by Program Type . . . . .	64
9-3.	'No' Responses Separated by Program Type . . . . .	64
9-4.	'Unsure' Responses Separated by Program Type . . . . .	65
	Comparison of Questions 9 and 10 Responses	
10-1.	'Both Needed' Separated by Response . . . . .	65
10-2.	'No' Responses Separated by Response . . . . .	65
10-3.	Responses with 'Unsure' to Question 9 . . . . .	66
	Analysis of Question 10 Responses	
10-4.	'Yes' Responses Separated by Program Type . . . . .	66
10-5.	'No' Responses Separated by Program Type . . . . .	66
10-6.	'Unsure' Responses Separated by Program Type . . . . .	66
9/10.	Analysis of Responses to Questions 9 and 10 . . . . .	67
11.	Teacher Inservice Need--Separated by Response . . . . .	68
12.	Consultant Availability-- Separated by Response . . . . .	69
13.	Administrator's Support-- Separated by Response . . . . .	70
14.	Peer Support-- Separated by Response . . . . .	71



# TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS. . . . .	ii
VITA. . . . .	.iii
LIST OF TABLES. . . . .	v
Chapter	
I. INTRODUCTION AND HISTORICAL REVIEW . . . . .	1
Introduction . . . . .	.1
Significance of the Study . . . . .	11
Limitations of the Study . . . . .	14
Statement of the Problem . . . . .	15
Purpose of the Study . . . . .	16
Definition of Terms . . . . .	16
Organization of the Study . . . . .	17
II. LITERATURE REVIEW . . . . .	.18
III. DESIGN OF THE STUDY . . . . .	.31
Sample . . . . .	.31
Design of the Study. . . . .	.32
Description of the Surveys Used. . . . .	.33
Definition of Program Types. . . . .	.35
Procedures . . . . .	.37
Limitations of Results . . . . .	.38
IV. DISCUSSION. . . . .	.39
Discussion of College Administrator Survey . . . . .	.39
Discussion of Teacher Survey Results . . . . .	.39
V. CONCLUSIONS AND IMPLICATIONS. . . . .	.72
Discussion of Findings . . . . .	.72
Significance . . . . .	.74
REFERENCES . . . . .	.76
OTHER RESOURCES . . . . .	.80
APPENDICES	
Appendix A . . . . .	.83
Appendix B . . . . .	.89
Appendix C . . . . .	.91

Appendix D . . . . .	.94
Appendix E . . . . .	.95

## CHAPTER I

### INTRODUCTION AND HISTORICAL REVIEW

#### INTRODUCTION

"All men are created equal" is a sentiment commonly accepted by most Americans, and a concept which has been fought for by many minority groups for centuries. Slaves in America needed a civil war to make changes in their lives and to allow them to begin realizing their equality during the nineteenth century.

A second minority group, the handicapped, required an additional century before they had a vehicle to assist them in realizing that they were also created equal. In place of a civil war, the vehicle was the federal public law, 94-142: The Education of All Handicapped Children Act (1975). Among the many rights guaranteed to the handicapped is the assurance that whenever possible, the handicapped students will receive their education in an environment as near that of non-handicapped peers as is educationally appropriate. (Clarkson, 1982).

The history which led up to the passage of this key law has been relatively brief when compared to general education

as will be realized in the following overview. A more complete overview of historical events in special education was published in the Council for Exceptional Children (CEC) publication of 1970: Teaching Exceptional Children in All America's Schools. (Appendix A). The history of Illinois will be looked at more carefully, as it directly affected this study.

"In the late 1800's, some residential schools had been established for the deaf, the blind, and the retarded," (Brenton, 1974) but very few public school programs were known to exist in any established form during this early time. Families who had handicapped children simply kept them at home and out of the view of the general public. Fortunately for these children, the practice of infanticide, popular in Greece, was no longer being practiced. Instead, families kept these children at home and trained them to function within the family unit. Formal education was not mandated for any children, so a child who did not attend school was not so noticeable then as when the mandatory attendance laws were enacted.

The early interests in special education can be traced to certain individuals who worked with specific types of handicaps. Edward Seguin came from France to influence the development of programs in the United States. When Seguin fled France, he migrated to America and brought with him the ideas and beliefs in the benefits of educating retarded

individuals. He subsequently served as a consultant for schools devoted to the education of the retarded in the United States. Seguin had worked with Jean Marc Gaspard Itard, best known for his work with Victor, the wild boy of Aveyron while still in Europe.

In Illinois, the history of special education is also brief. As early as the late 1800's, the Illinois General Assembly had enacted laws concerning handicapped children. Services on a State level were being offered through the Illinois Braille and Sight Saving School before 1900. About the same time, scattered centers were available for the 'feeble-minded' at state expense. In 1911, HB 460 passed allowing public schools to develop classes for the 'deaf and dumb' as well as for blind children. A second bill that same year established classes for delinquent children who had been processed through the Illinois court system.

Throughout the 1900's, special education went through many changes. Institutionalization was practiced early in the century, (1900 to 1950) during which any child, regardless of handicapping condition, was placed in a large institution intermixed with others of varying conditions and ages. Institutions were private or government supported. The private facilities were generally expensive, and used by families who were seeking a place in which they could 'put away' their handicapped child. The most commonly found type of handicapped individual in such facilities was the mentally

retarded child, regardless of the severity of retardation. In some states, the state government supported facilities for those who could not afford the costs of private placements.

The period between 1920 and 1950 offered handicapped children many changes and greater opportunities for an education in Illinois. In 1923, HB 325 established the first programs for crippled children in the state. Early in the 1930's, similar programs were offered to visually and hearing impaired school-aged children. The first payment structure was established in 1941, when payments for tuition and transportation services were approved for handicapped children. In 1943, state certification of school psychologists was initiated, providing a mechanism for evaluation of handicapped students through the public schools. During the same time, The School Code of Illinois was being written. It was adopted in 1945.

Illinois maintained state facilities during the 1940's, 1950's and 1960's. (One such facility was visited by this author). The stated purpose for the visited facility was to serve mentally retarded children and adolescents. The entire facility consisted of rows of buildings housing individuals separated according to age and sex differences. The three or four buildings toured contained cots lined in close rows with a blanket, and perhaps a pillow, on each. The 'patients' were mostly not toilet trained, but stood or slept in their own excrement until given a bath or shower on at least a weekly

basis. (Becker, 1962, Feb.) While the observation made at this particular state facility may not be an accurate representation of conditions in existence at all such facilities in Illinois, it was made during the era of institutionalization. Conditions in other state facilities probably varied over a wide continuum, but were evidently less than desirable in general, as evidenced by concerns regarding the appropriate setting in which students should be maintained and/or be educated. The era of institutionalization began to break down when, under the pressure of parent and professional groups, school systems began to offer programs in public schools. This allowed the parents more input to the operation of the programs.

The separate school era (1950 to 1970) meant that children with handicaps could at least receive some type of programming within the geographic proximity of their homes, and could return to their families at night. Programs for blind, deaf, physically handicapped, and severely mentally retarded children could be found in most larger school systems of the northern half of the United States. Speech therapy was offered to varying extents in many more schools. Disadvantages of this new attempt to educate all children included labeling and separation, which often seriously affected the emotional state of the handicapped student who was isolated from the normal school population. They were more easily seen, but not a part of the school population. This era lost its popularity when it was felt that there was

no benefit in separating and isolating the handicapped child from normal peers.

In 1955, Illinois approved the inclusion of the Trainable Mentally Handicapped as a part of the public school system. Prior to that, most retarded children were in insititutional settings and excluded from public school attendance. It was not until 1965, (when HB 1407 was enacted), that Illinois mandated provision of services to handicapped students in all districts of the state by 1969.

The era of "normalization" (1970 to 1980) followed, spurred on earlier by Kennedy and Humphrey, who each had handicapped individuals in their families, (Hagerty and Howard, 1978), and the passage of PL 94-142 (1977). During this era, pressure groups insisted on the use of least restrictive placements, including the practice of 'mainstreaming' handicapped students. This term was popularized, even though the word 'mainstreaming' does not appear in the public law. 'Mainstreaming,' according to the Council for Exceptional Children (1975),

- provides the most appropriate education for each child in the least restrictive setting.

- looks at the educational needs of children instead of clinical or diagnostic labels such as mentally handicapped, learning disabled, physically handicapped, hearing impaired, or gifted.

- searches for and creates alternatives that will help general educators serve children with learning or adjustment problems in the regular setting. Some approaches being used to help achieve this are consulting teachers, methods and materials specialists, itinerant teachers, and resource room teachers. - unites the skills of general education and special education so that all



children may have equal educational opportunity. (CEC (1975), in Clarkson (1982).)

"Mainstreaming involves the concept that each student is worthy of receiving the best that is available. Handicaps are to be understood as individual differences rather than as inferior qualities. In other words, to be different from the norm is not to be stigmatized; 'its what being human is all about'." (Haglund and Stevens, 1980)

The quantity of services for the handicapped grew at rapid rate during this era. " . . . since 1948, the number of handicapped boys and girls receiving special education services of all kinds has increased an astonishing sixfold." (Brenton, 1974). The author worked in a sparsely populated rural area of Illinois during this time. His responsibility was to serve two large counties and to inservice regular classroom teachers on procedures for dealing with handicapped students in mainstream classes where no special education trained or certified teachers were available. (Becker, 1972-75)

Several factors have supported this rapid growth of programs for the handicapped. All of the factors in concert helped to move the services for the handicapped toward the types of programs available today. One such factor was the use of the nation's court system.

In 1971, the Pennsylvania Association for Retarded Children (PARC) v. Pennsylvania case "established the right of parents to participate in major decisions affecting their child." It also established the "rights to education, right to treatment, due process, and least restrictive alternatives". (Brenton, 1974) Viewed as a landmark case, it at last obligated the public schools "to provide appropriate education for literally all children". (Brenton, 1974).

In the Brown v. Topeka Board of Education case of 1954, the Supreme Court proclaimed: "In these days it is doubtful that any child may reasonably be expected to succeed in life if he is denied opportunity for an education. Such an opportunity, where the state has undertaken to provide it, is a right which must be available to all on equal terms." (Abeson and Zettel, 1977).

The Mills v. District of Columbia Board of Education decision (1972) by Judge Joseph C. Waddy offered more strength to the child's rights when it was ruled that "every child, regardless of conditions or handicaps, has a constitutional right to public schooling." (Brenton, 1974). This established the public schools' responsibility for educating, in public schools, children who were handicapped.

In addition to the court systems, the nation's legislators began demonstrating their interest in special education through the passage of several key pieces of legislation. The impetus for their involvement resulted from

the "assumption that nonhandicapped peers function as behavioral models and/or reinforcing agents for handicapped youngsters within the context of positive social interaction." (Snyder, Appolloni, and Cooke, 1977). Secondly, there was a movement to "eliminate . . . labels . . . and to look at children from the point of view of their specific and idiosyncratic physical, mental, emotional, and learning problems." (Brenton, 1974).

One of the most famous of the acts which directly affect the handicapped population is Section 504 of the Vocational Rehabilitation Act Amendments of 1973. "Section 504 is a basic civil rights provision with respect to terminating discrimination against America's handicapped citizens." (Ballard and Zettel, 1977). Section 504 is very brief in length, but has had tremendous impact on the rights and treatment of the handicapped child, when it states that, if the handicapped individual is "otherwise qualified", he cannot be "excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." (Ballard and Zettel, 1977). This, of course, included public schools.

The Federal government became directly involved with the whole movement of special education in 1967 with the establishment of the Bureau of Education for the Handicapped. Designed as a part of the United States Office of Education, the Bureau has had a rather stormy tenure. Each President

made some change in the Bureau, and it was even dissolved at one point, only to be reinstated during the second term of the Reagan administration. It currently is functioning, but outside of the Office of Education.

A third factor which affected the entire developmental process of special education was the inception of several parent-professional groups. Although many have contributed, there are several which are individually noteworthy. The Council for Exceptional Children (CEC) was founded in 1922 and today is the largest single organization interested in handicapped children. It has divisions for all handicaps, administrators, related services, and the gifted population. There are state federations in nearly every state, and also international associations.

In the Chicago area, one of the early groups which combined parents and professionals was The Fund. It functioned out of the near north side of Chicago, and had influence on many aspects of the development of special education. CEC and The Fund were quite influential when, through combined efforts, they worked on the design and passage of PL 94-142, as well as Illinois House Bill 150 (which will be discussed in detail later). (See Appendix D--HB 150.)

In 1968, the Education Professions Development Act "funded two hundred training programs for training 'regular educators to teach handicapped children'." (Brenton, 1974).

This is the first verifiable instance of the concept of regular classroom teachers becoming involved with the handicapped. Parent groups were seeing positive movement toward true mainstreaming practices with passage of this Act. Special Education was beginning to be a part of, not a part away from, regular education.

The skills needed by teachers of these new students were studied by Freeman and Becker (1979, Winter). Through survey responses, teachers stated that they needed both more extensive coursework and to develop skills in teaching math, reading, and spelling to children who are unable to learn at the same rate as their classmates. The results of that study were used in Illinois to assist in the decision making process as HB 150 was developed.

With the passage of HB 150, teachers were required to take coursework in the identification of and methods for teaching handicapped children in the regular classroom setting. This study will examine the impact of HB 150.

Specifically: has the implementation of HB 150 helped teachers recognize and accommodate the mainstreamed mildly-to-moderately handicapped student within the regular classroom because of their teacher training programs?

#### SIGNIFICANCE OF THE STUDY

Two forces have impacted education recently. First, federal level funding cuts have forced school districts to reexamine their special education programs for availability of (possibly less costly) mainstream programs. Second, research

has failed to support the benefits of the more restrictive self-contained special education programming concept.

There is support in research for the social benefits of the handicapped population when it is a part of the regular school system. Many research projects demonstrated (as discussed in the next section) that the benefits to both the special education student and to the regular education students were significant and more cost-effective. The problem which prevented this from occurring appeared to be attitudes of teachers unprepared to make classroom modifications required to meet special learners' needs in mainstream classrooms.

Several states, including Illinois, made attempts to offer the teachers already enrolled in training programs the types of information relating to needs of the handicapped which these teachers had requested. Illinois developed and passed HB 150 to accomplish this. (A more detailed discussion on its development is given in Chapter 2.) Basically, HB 150 requires teachers to pass a three semester hour (or equivalent) course prior to applying for their first teaching certificate. This course must cover the characteristics and methods for teaching handicapped students. Illinois further requires experienced teachers who have moved from another state and/or who have allowed their Illinois certificates to lapse to have the same coursework prior to being certified. The Illinois bill does not require inservice training for teachers certified prior to HB 150's requirements, nor does it

require them to gain this to renew their certificates. Because of this, the population affected by HB 150 is threefold:

1. Teachers in training programs prior to the passage of HB 150.
2. Teachers who are having their certificates reinstated.
3. Teachers who held certification from other states and are applying for equivalent Illinois certificates.

The results of the study are important to the fields of special education as well as regular education, and, at the same time, for inservice and preservice teacher training. While the Education of All Handicapped Children Act requires that handicapped students be taught in the environment as near as normal one as appropriate, teachers were not trained to meet this new demand. Illinois enacted House Bill 150 as an attempt to fill this need. It will, therefore, be of interest to many to realize the success or failure of this new required training program. Because of the results of the study, training institutions may want to alter their particular way of presenting the training, and others may change entirely to the alternate method of training. Additionally, because of the findings, school districts may wish to implement inservice programs for their teachers who did not train under the requirements of HB 150.

It was assumed that more training programs would use the infusion model for their program. It was also assumed that teachers who trained under the infusion model would support it

as the more effective type model and recommend it for all schools. The questionnaire was designed based on these assumptions.

#### LIMITATIONS OF THE STUDY

This study was limited by the time frame of HB 150, (1980-1985), and only elementary teachers were included. Secondary teachers were excluded due to the departmentalization practice and probable limited all-day contact of one teacher with one student. It would be more difficult to discuss the curriculum changes made for a student when each teacher sees that student for fifty minutes daily, and each teacher meets one hundred fifty to three hundred different students on a daily basis. The third limitation for the study was the exclusion of teachers employed by the Chicago Board of Education due to the unique certification requirements of the Chicago Board of Education. The Chicago Board of Education's certification requirements do not require that teachers possess an Illinois Teacher's Certificate, among other differences, therefore, HB 150's impact was not necessarily to be felt by recent graduates teaching in Chicago City Schools. Many teachers employed by the Chicago Board do hold dual certification (Chicago and Illinois), but this survey was not designed to accommodate for this variation, thus Chicago teachers were excluded.

This study was designed to determine the impact of changes in teacher preparation programs on educational opportunities for mildly-to-moderately handicapped students.



A part of this broad topic includes the evaluation of effectiveness of the two main types of implementation programs used to meet the intent of House Bill 150. Further examination of this question was the purpose for questioning teachers on how well-prepared they felt as a result of the specific type of program they experienced in their degree program.

A determination of the amount of curriculum modification which is being made for mainstreamed handicapped students by teachers trained under the requirements of HB 150 was made through examination of teacher responses. Also included was an attempt to identify the availability of commercial materials which could be used with mainstreamed handicapped students.

Specifically: Has the implementation of HB 150 helped teachers identify and accommodate the mainstreamed mildly-to-moderately handicapped student into the regular classroom because of their teacher training programs?

#### STATEMENT OF THE PROBLEM

The problem under consideration involved elementary school teachers and teacher training facilities. The problem was four-fold:

1. To determine the type of program used to meet the requirements of Illinois HB 150.
2. To determine the amount of information the teachers felt they had received during the training program.
3. To determine which type of program the teachers felt

would best serve future teachers to offer the needed information to mainstreamed mildly handicapped students.

4. To determine any attitude change on the concept of mainstreaming in the teachers who had received training on mainstreaming of handicapped students.

#### PURPOSE OF THE STUDY

The purpose of this study was to examine the following research questions:

1. To examine the type of program used to meet the requirements of Illinois House Bill 150.
2. To examine the amount of information the teachers felt they obtained from their training programs.
3. To examine which type of program the teacher felt would best serve future teachers to offer the needed information to mainstreamed mildly handicapped students.
4. To examine through extrapolation any attitude change on the concept of mainstreaming in the teachers who had received training about mainstreamed handicapped students.

#### DEFINITION OF TERMS

1. HB 150 implementation programs:
  - a. Separate Class: One or more required courses specifically designed to convey information about the characteristics and methods for teaching mildly handicapped students in the regular classroom setting.
  - b. Infusion Model: Similar information to that listed above is incorporated into the methods courses in the

regular teacher training curriculum.

2. Mildly to Moderately Handicapped Students: Elementary school students who have been classified under any of Illinois' allowed categories through an approved placement procedure and are in a regular classroom setting for some part of the school day.

#### ORGANIZATION OF THE STUDY

This study was organized into five chapters as follows:

Chapter 1 contains an introductory statement of the problem, significance of the study, definition of terms, and limitations of the study.

Chapter 2 contains a review of the literature summarizing the writings concerning mainstreaming practices, teacher and peer group attitudes about handicapped individuals, and teacher preparation practices. In addition, literature related to adult learning was examined, but not quoted in this report.

Chapter 3 contains the description of the design of the study, the populations chosen to participate in the study, and the procedures used to collect the data for the study.

Chapter 4 contains the findings, descriptive data, analysis of the data, and a summary of the findings. Included are the questions asked on the surveys, and the results obtained on each question.

Chapter 5 contains a summary of the findings revealed by the study, the conclusions drawn, discussion and implications of the findings, and recommendations for further study.

## CHAPTER II

### LITERATURE REVIEW

A review of literature related to this study centered on the concept of mainstreaming. More specifically, the literature (identifying effects of mainstreaming on teacher attitudes, teacher training programs, teacher certification, and on students) was examined for comparison of purpose and results with HB 150.

Soon after regular teachers began to be trained to teach handicapped children, authors, including Donald Zemanek and Barry Lehrer began discussing the need for closer working relationships between regular and special educators. They spoke of the "need to serve as inservice providers, consultants, " (Zemanek and Lehrer, 1977) for the regular classroom teachers. They were suggesting that the colleges and universities needed to train teachers to serve in these roles. In a similar way, Israelson proposed that "a program specifically designed to simulate various handicapping conditions (should be taught) to aid (teachers) in accepting mainstreamed students." (Israelson, 1980). All of these actions and concepts directly supported the concept of what was to become Illinois House Bill 150.

As late as the 1970's, just prior to the passage of Public Law 94-142, data collected by the Children's Defense Fund found that "handicapped children in the United States are excluded from the public school system and will not go through the educational process." (Abeson and Zettel, 1977). The conclusions drawn from the study stated that "out of school, children share a common characteristic of differentness by virtue of race, income, physical, mental, or emotional handicap and age." (Abeson and Zettel, 1977). This helped to demonstrate that the handicapped were, at the same time, children with the same needs and differences as the normal population. The feelings of acceptance by the public are, were, and will continue to be a difficult area with which to deal. "The Education of the Handicapped Act presumes the worth of all human beings is the same, and the legal rights of the handicapped to a public education are intact." (Glover and Gary, 1976)

When the Education of all Handicapped Children Act (PL 94-142) was passed and signed by President Gerald Ford in 1977, it represented a culmination of "the standards that have been laid by the courts, legislatures, and other policy bodies of our country." (Abeson and Zettel, 1977). The passage created much excitement in the special education teaching circle, and was viewed as "the national vehicle whereby the promises of state and local policy that (had been) heard for so long . . . hoped for, for so long, may become a reality." (Abeson and Zettel, 1977). The law is often described by

those in the profession as the most comprehensive bill of rights for the greatest number of handicapped children ever passed. "Since the conception of P.L. 94-142, . . . what was once solely a moral issue has evolved into a legal issue as well." (Rider, 1980). The mandatory provision of "the law covers classroom instruction" (Rider, 1980), and the use of "specifically designed instruction". (Rider, 1980).

What followed the passage of PL 94-142 was the "Right of Education Movement" which resulted in "the development of classes for the severely retarded in public schools" (Poorman, 1980), and at the same time, "mildly handicapped children (were) being moved and integrated with regular classmates . . ." (Poorman, 1980). This type of change in schools created the "need to look at the manner in which inservice education is approached" (Nadler, Merron, and Friedel, 1980). Teachers, who may not have had any training with handicapped children were suddenly faced with the possibility of having a handicapped child mainstreamed into their classroom. An "increased job related stress [was] brought on by added responsibility for team meetings, due process paperwork", and the feeling that there existed a need for "skill development" and "training" (Bensky, et al., 1980), focused on the needs and techniques for dealing with this "new" type of student in the classroom.

The change toward public school settings demanded an attitudinal change on the part of many people. "With minor

exceptions, mankind's attitudes toward its handicapped population can be characterized by overwhelming prejudice." Abeson and Zettel, 1977). They were "systematically isolated (from) the mainstream of society. From ancient to modern times, the physically, mentally, or emotionally disabled have been alternatively viewed by the majority as dangerous, to be destroyed, as nuisances to be driven out, or as burdens to be confined . . . " (Lori v. California, 1973, in Abeson and Zettel, 1977).

Robert Bogdan reported on the attitudinal changes observed in his study on twenty-five schools which had tried mainstreaming on a wide range of levels. (1983, February). He stated that "the receptivity of administrators and teachers to integrating children defined as handicapped depends on their general receptivity to change and on conflicts and relationships that are already part of the social structure of a given school and community."

A seven-week study of mainstreamed mildly handicapped elementary students was used to determine the change of peer acceptance when mainstreaming occurred. A system called Cooperative Learning involved the use of a reward system for all class members. The non-handicapped students demonstrated less rejection of the handicapped when involved in the Cooperative Learning Program than did the experimental group without the Cooperative Learning Program. Slovin and Madden, in reporting these results concluded that attitudes can be changed when working closely together (1983, Summer).

Coleman and Gilliam (1983, Summer) completed a study of one hundred thirty-nine first through sixth grade teachers who read a vignette of a hypothetical emotionally disturbed student. These teachers responded to an attitudinal survey. They responded most negatively toward students characterized as aggressive and less negatively toward those who avoided peers. Regardless of the vignette read, teachers responded with more concern for mainstreamed students and less for the other students; they gave the least concern for themselves.

Many authors, including Christopolos and Renz (1969), Hobbs (1975), Kirp, Buss, and Kureloff (1974), Kolstoe (1972), Lilly (1970), and Sorgen (1976), have focused on the concept that special education classes did not appear to be effective in increasing the academic competence of mildly handicapped students and on the possible negative effects of labeling on teacher expectations and the self-images of the children.

"It was the teachers themselves who appeared to make the difference . . . they were characterized . . . by an extraordinary collegiality and a sense of mission for exceeding that of the typical elementary faculty . . ." (Dokecki, 1983, Summer).

An apparently successful change, reported by Daimar Robinson, occurred in Utah. Robinson reported on a school's effort to make mainstreaming work by accepting the attitude that . . . the unique needs of handicapped children "can be carried a step further to include every child who attends public school." (1982, November). The Utah State Board



adopted policies to assure a close working relationship between regular and special education for the entire state. A key factor for program success was a set of "systems to train teachers and other nonprofessional counselors to work successfully with individual parents and students in the planning process." (Robinson, 1982, November).

Ideally, such integration goes beyond placing handicapped and nonhandicapped students in close physical proximity. It involves "training sessions for administrators, regular classroom teachers, non-handicapped students, and parents . . . Such integration has the potential of benefitting both handicapped and non-handicapped students." (Hanline and Murray, 1984, December). Cantrell and Cantrell (1984) state that "collaborative efforts between regular and special educators should extend beyond the handicapped student's initial placement into the mainstream."

A study by Edelsky and Rosegrant showed the effects of mainstreaming on very young children in a study which demonstrated that non-handicapped preschoolers provide a more nearly normal language environment for severely handicapped students . . . " (in Hanline and Murray, 1984, December).

Continuing this interaction in upper grades, Custer and Osguthorpe interviewed students who had been involved in a non-handicapped/handicapped tutoring program. They found that 96% of the non-handicapped students "felt that making friends with their handicapped tutors was easy" and "that the tutors

were 'fun to be with', and that they felt 'much more friendly' toward the tutors following the tutoring." (1983, October). "Research suggests that the success of the mainstreaming effort is often dependent on the quality of communication and support between" regular and special educators. (Cantrell and Cantrell, 1984).

"Teacher skill and attitude have been identified as critical variables in the success of mainstreaming." (Alexander and Strain in Salend, 1984, February) "therefore, if mainstreaming is to be successful, inservice training should be provided to regular and special education personnel." (Tymitz-Wolf in Salend, 1984, February) "Results of field-based programs showed that teachers exited the training sessions with increased skills and more positive attitudes toward mainstreaming." (Carlson and Potter; Yates; in Salend, 1984, February)

Stainback and Stainback (1984) suggested that the nation should carry the entire mainstreaming issue one step further and move toward a "merger of special and regular education into one unified system structured to meet the unique needs of all students." There are many advantages for such a consideration, but cost efficiency is the main advantage created by removal of the dual system. At the same time, problems have been identified which stand in the way of successful mainstreaming. Teachers stated concerns that "they did not have the technical abilities necessary to work with

students who were handicapped." They were also "concerned that these students would take too much time from their responsibility to provide educational services to the students who were not handicapped." (Williams and Algozzine, in Ivarie, et al., 1984, October)

The nation had made its commitment to the handicapped during the 1970's and so did Illinois. The most significant step forward in Illinois was the passage of House Bill 150, which represented a major development in programming for handicapped individuals of school age. The concepts and beliefs discussed in the preceding paragraphs served as the philosophical basis for the concept found in HB 150. The original idea for creating some type of legislation or change in the certification requirements began in 1974 with the Glen Ellyn Chapter of the Illinois Association for Children with Learning Disabilities (later changed to Ill. Assn. for Citizens with L. D.). The organization, composed of parents and professionals, sought appropriate education for handicapped students, specifically those with learning disabilities.

The enactment of this bill (as in other states) was based on a collection of studies and data gathered, some of which is discussed next. Shortly after the passage of PL 94-142, "the General Accounting Office . . . reported that the school administrators it had surveyed thought inservice training in special education for general classroom teachers was 'vital'." It also felt that . . . "the U.S. Office of

Education has been unwisely spending its money by training more special educators while ignoring the pressing needs for inservice training of general classroom teachers." (Hagerty and Howard, 1978) When IACLD decided to attempt to make changes in the placement of handicapped children, they were most interested in seeing the appropriate handicapped student moved out of the self-contained classroom into the regular classrooms as would be beneficial to all concerned. The organization designed a resolution which basically stated that they expected the children to move out of the special education classroom.

Working closely with The Fund, Marion L. Dodd, IACLD legislative chairperson, wrote the position paper representing the association. Beginning in 1976, this paper was presented at many public and governmental hearings in Illinois. Mrs. Dodd also presented at every organization's meeting or convention that would allow her speaking time. On September 29, 1977, she testified at the Governor's Commission on State Mandates regarding the growing evidence that regular classroom teachers were not prepared to handle the influx of handicapped students into their regular classroom. This reiterated the essence of the theme she had been discussing for nearly two years. Supported by many articles and reports, Mrs. Dodd continued to speak whenever possible on the topic. (Dodd, 1985). Others held the same viewpoint, as exemplified by Peggy Glazzard's statement that "Special teachers need to prepare regular teachers before mainstreaming exceptional

students into regular classes." (Glazzard, 1980). In the same article, Ms. Glazzard offered many suggestions which the regular classroom teacher might use in the classroom with mainstreamed handicapped children.

Mrs. Dodd became the IACLD legislative representative for the Illinois Special Education Legislative Association (which presented the concepts of her talks as their legislative platform). The IACLD Newsletter (1978) presented the written report of the testimony which had been given to the various state agencies. The concept was publicized by informing a larger population of professionals. People were becoming familiar with the idea, so the next step was to work for passage of a bill.

Three sponsors were involved in moving the resolution through the Illinois legislature. The first, John Porter (Evanston), presented the resolution to committee late in the session. Due to a lack of members present, the resolution did not pass out of the House Elementary and Secondary Education Committee. It failed to receive support partly because of the inclusion that all teachers needed to have either the class or coursework. (There were members on that committee who were teachers or who had family members who would be required to go back to school to continue to qualify.) (Dodd, 1985).

The second sponsor, H. Skinner (Crystal Lake), submitted the resolution during the next session. The resolution remained in the Elementary and Secondary Committee. The

portion about current teachers was removed, but administrators were still required to take coursework, as were new teachers. Pressure prevented the committee from acting on the resolution stated in that form. (Dodd, 1985).

At the IACLD state conference, held at Springfield in May, 1978, Mrs. Dodd spoke stressing the importance of the concept. She distributed paper and pencils, and asked every member in attendance to immediately write letters to their Senator and Representative telling them what this bill would mean to them. She collected all letters and mailed them to Glenn Schneider, a teacher and Chairman of the Elementary and Secondary Education Committee. The final proposal outlined that three semester hours of course work should be required of all newly certified teachers. There was no option providing for infusion of information into existing courses in the curriculum. This set of criteria, plus the demonstrated support of teachers, emphasized the need for such a bill to the legislators.

The third sponsor, Gene Slickmann (Arlington Heights), had met Mrs. Dodd in 1971 when she spoke to the committee chaired by Slickmann. He was familiar with her interests (and aware that her daughter was learning disabled). Slickmann offered to resubmit the resolution as a result of their chance meeting. At the opening session in 1979, Slickmann's office notified Mrs. Dodd that the bill had been numbered HB 150. This notification began the final campaign for passage of the

bill. Mrs. Dodd began by sending articles and news items addressing the issue to every member of the Elementary and Secondary Committee.

During the legislative hearings, higher education groups pressed to change the specified requirement (for one course) to allow them to design the content into the existing courses, (thereby not needing to add course hours to the current program). A compromise was made when the certification board decided that the intent of the bill was being met and the training institutions could design their own programs to meet the intent of the bill. (Bentz, 1985)

Some individuals felt that the compromise weakened the original intent of the bill and it " . . . was blunted by an amendment which changed it to read 'course work'. This did not change the intent of the legislators. They sincerely meant to afford handicapped children equal educational opportunity." (Dodd, 1985).

HB 150 passed in 1979 and became effective in 1981. (It was passed by a veto override when Gov. James Thompson inadvertently vetoed it through a misunderstanding. This error was corrected when Slickmann resubmitted the bill for an override vote. It passed the Senate unanimously and lacked unanimity in the House by only three votes.) (Dodd, 1985).

The final adopted form allowed training facilities to develop a curriculum which included the equivalent of three semester hours in the characteristics and methods for the

education of handicapped children. As a result, newly graduated students who are applying for their first teaching certificate in Illinois are required to demonstrate that they have completed such coursework before applying for certification. Additionally, any teacher who comes into Illinois and applies for an Illinois Teaching Certificate for the first time also must complete such coursework. A third group which must demonstrate this coursework includes any teacher who has allowed his certificate registrations to lapse (by failing to renew those certificates on an annual basis) and is reapplying for registration of a certificate.

It seems appropriate on the one hundredth birthday of the symbol of freedom, the Statue of Liberty, that this study will examine the effectiveness of the efforts just discussed in realizing equal opportunity for the handicapped. In Illinois, the legislators' interest in preservice training added the dimension of HB 150 to attempt to carry the handicapped's rights into each classroom.

"An obvious prerequisite to the successful integration (mainstreaming) of handicapped students into the regular classroom is adequate preparation of regular teachers for these newly assigned roles." (Leyser and Abrams, 1984, February) in effect.



## CHAPTER III

### DESIGN OF THE STUDY

This study was structured to isolate the effects, if any, that changes in teacher training requirements (established by HB 150) have had on service delivery to mainstreamed handicapped students. The study concentrated specifically on the teacher's acceptance of mainstreamed handicapped students. A second area of concentration was the degree to which teachers felt the type of training they received was effective in preparing them for teaching mainstreamed handicapped students. To examine these questions, two types of training programs were identified and examined. This chapter describes the sample selected, the procedures used to examine the question, the limitations, and the methods applied to analyze the data gathered.

#### SAMPLE

Two sample groups were used for this study. The first group consisted of special education administrators (see Appendix E) from colleges and universities which had teacher training programs terminating in certification in special education or related fields. Twenty Illinois colleges/universities were chosen from the list of schools

which had a representative on the Higher Education Advisory Committee. Use of this list assured that the school met all of the specified requirements. All twenty of the questionnaires were returned.

The second sample for the survey included teachers randomly selected through a series of sample reductions. The first set of names was chosen via the Illinois State Board of Education computer in Springfield. The program identified elementary teachers working in Illinois schools who had completed their teaching degree within the past five years. Three thousand three hundred sixty-three names were produced using this method.

As the number of names was so large, severe reductions were made. Chicago school teachers were initially eliminated as they have some unique certification requirements. The remaining names (arranged according to the employing school's mailing address by town name and zip code with teacher names for each zip code not in alphabetical order) were randomly arranged. The first teacher name given for each town name was used. This random selection method reduced the original list to the four hundred forty-eight names used for the second survey. DESIGN OF THE STUDY

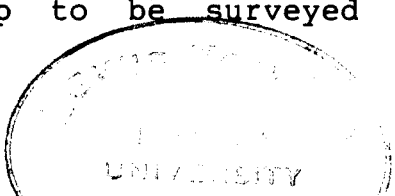
The design of the study was of the qualitative type. A survey of teacher preparation facilities and a second survey of practicing teachers were utilized to discover combinations of training types and teacher satisfaction with the type of training they received.

The questions for the first survey were developed with the help of other professors of special education at several training institutions. Specifically, a questionnaire was developed and given to the other professors to read, complete, and critique. Revisions were made and resubmitted for appraisal. The final draft was acceptable to those who had helped develop it. That questionnaire was then completed by those individuals and the type of information gathered was then evaluated. The results of that pre-survey appeared to offer the amount and types of information being sought.

The content validity of the second survey was developed in the same manner, then given to HEAC members for comments and suggestions. The resulting questionnaire was given to twenty-five special education teachers for completion and comments/suggestions. Some minor changes were made. Next, the questionnaire was reviewed by two building principals and two special education directors to determine whether there could be problems of any sort with sending the questionnaire into a school. The resulting document was the one used for the survey.

#### DESCRIPTION OF THE SURVEYS USED

The first survey (Appendix B) was sent to the twenty directors or supervisors of special education programs at the selected colleges/universities (Listed in Appendix E). The Higher Education Advisory Committee was chosen as the first group to be surveyed for several reasons. First, the



membership represents individuals who serve in special education administrative roles for their respective institutions. The members are department chairpersons, program directors, or division chairpersons in title. This level position offers the individuals surveyed ready access to the information needed to complete the survey.

A second reason for choosing the HEAC members was that most (possibly all) of them served on committees at various developmental stages/revisions of HB 150. They had a vested interest in the topic and the results of this type of survey.

A third reason for the choice was the access to the committee, available to the author as a committee member. It was a safe assumption that the majority of the questionnaires would be returned or that the author would have ready access to the respondent at the next HEAC meeting, ensuring a 100% return of surveys.

The questions asked were designed to identify the type of program the school was currently using. There were two choices given: separate course (or series of specific courses), or the infusion model (which involves special education materials and methods being blended into the content of existing education courses). The type of program offered at each school was examined through the responses to survey questions, and a discussion section (for any other types of information not covered in the survey) completed the one page survey.

Four groups of program offerings were identified as a

result of the survey. The questionnaire asked for a forced response of a single course, infusion model, or no course at all. The results of the survey demonstrated a fourth unpredicted program type: the total program (single course plus infusion model).

#### DEFINITION OF PROGRAM TYPES

To define the different program types seems appropriate. Type 1 programs were found in colleges and universities which had developed and offered a single course, equivalent to three semester hours, thereby meeting the requirements of HB 150. The course descriptions for these varied, but they all offered information on identifying and planning programs for the mildly handicapped mainstreamed student.

The second group, referred to as the infusion model, (Type 2) involved the incorporation of information about special education areas into as many other courses as possible. This program type was utilized by some institutions to avoid adding an extra course to the existing curriculum.

The third identified group of respondents indicated that they had not had any coursework in the area of exceptional children (Type 3). The respondents were part of the limited group who graduated since the passage of Illinois HB 150 and should have had some type of instruction. They did not perceive that it had been part of their educational program.

The fourth type, which had not been planned for in the questionnaire, will be referred to as the total program (Type 4). This type of program involves a single course, as in Type

1, and also the 'infusion' of information to other courses, as in Type 2. The comments of those who identified their program as this type suggested that some institutions had altered their programs to this type after trying one of the other types first.

The second survey (Appendix D) was sent to teachers currently teaching in an elementary school in Illinois, having completed their certification within the past five years. This population was narrowed limiting those surveyed to elementary teachers. The restriction of completing their training in the last five years should have assured that they had been required to take coursework as provided under HB 150. The survey questioned the type of program through which the teachers had received their training and how effective it had been. Teachers who received training under the requirements of HB 150, but who had not had any handicapped students mainstreamed into their classrooms were asked to return the blank survey so that data could be collected from this vantage point also.

The study was designed to confirm or not confirm the following hypothetical statements:

1. The teachers who graduated since HB.150 (1980) would identify the 'separate class' approach as the preferred service delivery mode to meet the requirements of Illinois House Bill 150.

2. Colleges and Universities which trained teachers would prefer the separate class approach to fulfill the requirements of Illinois House Bill 150.

3. Teachers who had completed their professional training since 1980 would state that they were prepared to plan and program for the mildly-to-moderately handicapped students mainstreamed into their classrooms.

A questionnaire was chosen as the method for collecting information as it offered an open-ended comment section for respondents to further explain their concerns and feelings on the issues involved. A percentage of responses for each question and each topic was calculated and reported.

#### PROCEDURES

The first survey was sent to HEAC members, and at the next HEAC meeting missing questionnaires were received.

The second survey, stamped return envelope, and introductory letter were all mailed to the teacher's school address. Of the four hundred forty-eight mailed, two hundred fifty-one (56%) were returned as of June 15, 1985 (when most schools would have closed for summer vacation). The returned surveys were divided into two groups. The first group included teachers who have (or had) handicapped students mainstreamed into their classes. The second group included

teachers who have not had handicapped students mainstreamed into their classes.

#### LIMITATIONS OF RESULTS

The specific results of this study were confined to the teachers who graduated since the passage of HB 150, were elementary teachers in Illinois, teachers who received training as specified in HB 150, and administrators of teacher training facilities in Illinois.



## CHAPTER IV

### DISCUSSION

#### DISCUSSION OF COLLEGE ADMINISTRATOR SURVEY

Of the twenty surveys returned, seventeen stated that they used the single course model (later referred to as Type 1). Three stated that they used the infusion model (later referred to as Type 2). Of the three, two indicated plans to change to the single course model (Type 1) during the 1985-86 school year. The remaining one using the infusion model stated that they would be changing to a combined model (Type 3) on a gradual basis between 1985 and 1987. (When that is completed, none of the twenty schools surveyed will be using a pure infusion (Type 2) model of service delivery.) There were indications in the written response areas that several facilities used a combined approach in their program. The forced answers on the questionnaire indicated the single course. This would be less accurate than it appears on the surface.

#### DISCUSSION OF TEACHER SURVEY RESULTS

There were three choices to each question: "yes" (indicating agreement), "no" (indicating disagreement), and "unsure" (indicating a response neither agreeing nor

disagreeing). Two hundred fifty-one questionnaires (53.55% of those mailed out) were received by return mail. One hundred eighteen (49%) were returned blank, indicating (as instructed in the cover letter) that no handicapped child had ever been mainstreamed into the respondent's classroom. One hundred twenty-three (51%) questionnaires were returned by teachers who had some experience with handicapped children mainstreamed into their classrooms. (Table 1). Of the returned questionnaires, the following cross section of the teaching population was represented:

TABLE 1

A. DEGREE:

(Information procured from Question 18)

1. 104 = Bachelor's Degree level
2. 7 = Bachelor's Degree level plus 15 or more hours
3. 12 = Master's Degree

B. AGE:

(Information procured from survey teacher information grid)

1. 82 were below the age of 30 years.
2. 33 were above the age of 30 years.
3. 8 gave no response regarding age.

C. YEARS TAUGHT:

(Information procured from Question 17)

1. 34 respondents = 1 (year)
2. 16 respondents = 2
3. 26 respondents = 3
4. 23 respondents = 4
5. 11 respondents = 5
6. 2 respondents = 6
7. 2 respondents = 7
8. 2 respondents = 8
9. 2 respondents = 10
10. 1 respondent = 13
11. 1 respondent = 15
12. 2 respondents = 17
13. 1 respondent = 20

D. ETHNIC COMPOSITION OF CLASS:

(Information procured from survey teacher information grid)

1. Mixed
2. All White

## E. TYPE OF SCHOOL

(Information procured from survey teacher information grid)

1. Suburban
2. Urban
3. Rural
4. Large
5. Small

A review of the questionnaires looks at many different aspects of the issues surrounding HB 150. A primary area to be assessed was the type of training program through which the respondents had acquired their degrees. This was assessed through Questions 1 & 2. There were two main choices: A single course (Type 1) or an existing course modified to include information about handicapped students (Type 2--infusion model). Several of the training institutions indicated that they had developed a combined approach offering one or more specific courses about exceptional children and also incorporated this information into other existing courses. Some of the teachers also indicated this third possibility. Some respondents also chose a combined approach of single course plus infusion model.

## QUESTIONS ONE & TWO

QUESTION 1: I had at least one specific course designed to teach me how to work with handicapped mainstreamed students.

QUESTION 2: Instead of having a specific course, I learned about the needs of handicapped students in all of my courses.

Examination of the questionnaires from the second survey revealed that sixty-one (51%) respondents had taken a single specific course which dealt with the needs of handicapped students. Nineteen (15%) indicated their coursework was taught using an infusion model. Eighteen (14.6%) responded 'no' to both questions, indicating they had neither taken a single course nor studied about handicapped students in existing courses (infusion model), Twenty-five (20%) indicated that they had taken both a single specific course dealing with the needs of handicapped students and also had received information about handicapped students through existing courses (infusion model). The eighteen who indicated that they had neither model had all completed their degree programs within the past five years and should have come under the requirements of HB 150. (TABLE 3).

## QUESTION THREE

QUESTION 3: The information learned was sufficient.

In an attempt to assess the quality portion of the training programs, respondents were asked to rate the sufficiency of information they gained through their college's program. 45% (55 of 123) felt the information received was sufficient in volume to aid in dealing with handicapped

children in their mainstream classrooms. 41% (50 of 123) of the respondents (regardless of their training) felt they had not received sufficient information through their college program. A complete comparison of these responses is delineated in Table 3.

When comparing those who had one course (twenty-six) plus those who were instructed through a combined approach (nineteen), these forty-five felt positive about their training. This is compared to those who did not feel they received sufficient information (twenty-four) when instructed through a single course, and three who were instructed through the combined program. One cell shows that two individuals had taken neither a single course nor received instruction through a combined approach, yet still felt they received sufficient information in their college program. A higher frequency of 'yes' responses came under the 'both' selection (nineteen) than did those three responding 'no' to the 'both' choice. (TABLE 3).

TABLE 3

RESPONSE	TYPE 1	TYPE 2	TYPE 3	TYPE 4	TOTAL
YES	26	8	2	19	55
NO	24	10	13	3	50
UNSURE	11	1	3	3	18
TOTALS	61	19	18	25	123

## KEY

TYPE 1 = Single Course

TYPE 2 = Infusion Model

TYPE 3 = No Coursework

TYPE 4 = Total Program

(Combination of Types 1 &amp; 2)

Of those trained through a single course (Type 1) model, twenty-six (42% of all Type 1) felt they had received sufficient information (indicated by a 'yes' response), twenty-four (39%) felt they did not receive sufficient information (indicated by a 'no' response), and eleven (18%) felt unsure whether they had received sufficient information through their training program (indicated by an 'unsure' response to Question 3). By contrast, those trained through the infusion model (Type 2), responded with only eight 'yes' answers (13% of all Type 2), ten (53%) 'no' answers, and only one 'unsure' answer. Of those who indicated that they received no coursework about special education (Type 3), two (11% of all Type 3) answered 'yes', while thirteen (72%) answered 'no' and three (17%) answered 'unsure'. Of those who

indicated a combined program (Type 4), nineteen (76% of all Type 4) answered 'yes', only three (12%) answered 'no', and another three (12%) answered 'unsure'. For all of the four types, fifty-five (45% of the 123 respondents) felt they had received sufficient information, fifty (41% of all respondents) felt they had not received sufficient information, and eighteen (15% of all respondents) were unsure whether they had received sufficient information. (Table 3).

#### QUESTION FOUR

QUESTION 4: I am now able to modify classroom lessons for the mainstreamed handicapped because of what I learned (1 or 2).

In the fourth question on the survey, the respondents were asked if they felt able to make needed modifications in classroom programming to to allow them to accomodate a handicapped child. Fifty-nine (48%) felt able, while thirty-five (28.5%) felt unable to make such accomodations based on the information gained in their teacher training program. Twenty-nine (23.5%) had no opinion.



TABLE 3/4

T	Q.3	Q.4	TL
1	Y	Y	22
1	Y	N	2
1	Y	U	2
1	N	N	11
1	N	Y	6
1	N	U	7
1	U	U	2
1	U	Y	7
1	U	N	2
2	Y	Y	6
2	Y	U	2
2	N	N	4
2	N	Y	2
2	N	U	4
2	U	U	1
3	Y	N	2
3	N	N	13
3	U	U	3
4	Y	Y	10
4	Y	N	1
4	Y	U	8
4	N	Y	3
4	U	Y	3

KEY

T = PROGRAM TYPE

Q.3 = QUESTION 3

Q.4 = QUESTION 4

TL = TOTAL

Y = YES

N = NO

U = UNSURE

TYPE 1 = SINGLE COURSE

TYPE 2 = INFUSION MODEL

TYPE 3 = NO COURSEWORK

TYPE 4 = TOTAL PROGRAM

(COMBINED

TYPE 1 & 2)

The combinations which must be questioned are the ones showing a 'no' response to Question 3 and a 'yes' response to Question 4, as Question 4 asks respondents to further explain the usefulness of the information in Question 3. If one felt that information received was insufficient (indicated by a 'no' to Question 2), the 'yes' to that information's usefulness (in Question 4) is meaningless. (TABLE 3/4).

The largest 'yes' numbers in the last column (22, 11, 13, & 10) are for answers which are both 'yes' in those columns for Question 3 and Question 4. (TABLE 3/4).

Looking further at the combination of Questions 3 and 4, only one respondent instructed through a combined approach (Type 4) felt he had received information to make accommodations in the classroom, while 67% (24 of 36) felt they received sufficient information to make accommodations in the classroom. No respondents in Type 3 (having had no training) felt they could make accommodations. The most frequent response in Type 3 (total = 13) results from a matched pair of 'no's' to Questions 3 and 4.

When comparing the respondents instructed through a single course (Type 1) to the respondents instructed through the infusion model (Type 2), there is stronger support for Type 1, with twenty-two responding 'yes' to Questions 3 and 4. The same matched combination under Type 2 (infusion) resulted in only six respondents agreeing with the statement. Eleven respondents disagreed with the sufficiency of information providing them the ability to adapt the classroom under Type

1, and four did so under Type 2. There is support for information being offered through a combined approach or a specific course when compared to the lack of support for the infusion model. (TABLE 3/4).

#### QUESTION FIVE

QUESTION 5: The information gathered during my teacher training is now directly applicable to my classroom.

In Question 5, respondents were asked a question similar to Questions 3 and 4. They were asked whether the information obtained during their training (Type 1, 2, or 4) was directly applicable to the classroom. Table 5-1 identifies percentages of 'yes', 'no', and 'unsure' responses, while Table 5-2 separates the responses by type of preservice program. Table 5-3 separates 'yes' responses by Type, while Tables 5-4 and 5-5 separate 'no' and 'unsure' responses, respectively.

Fifty-eight percent of the teachers felt they could teach a handicapped student in their mainstream classroom because of information learned during their teacher training program. This feeling, coupled with the overwhelming support for the mainstreaming concept (discussed in Question 8) is very encouraging for teachers who want to teach a wide range of students in the mainstream classroom. (TABLE 3/4/5).

TABLE 5-1

R	#	%
Y	33	26.83
N	49	39.84
U	41	33.33

TABLE 5-2

T	4	3	2	1	TL
R					
Y	7	4	2	20	33
N	6	9	11	23	49
U	12	5	6	18	41

## KEY

R = RESPONSE  
 # = NUMBER  
 % = PERCENTAGE  
 T = TYPE  
 Y = YES  
 N = NO

4 = TYPE 4 (TOTAL PROGRAM)  
 3 = TYPE 3 (NO COURSEWORK)  
 2 = TYPE 2 (INFUSION MODEL)  
 1 = TYPE 1 (SINGLE COURSE)  
 U = UNSURE  
 TL = TOTAL

(Percentages rounded to nearest hundredth)

TABLE 5-3

T	#	% TL	% YES
1	20	16.26	60.61
2	2	1.63	6.06
3	4	3.25	9.09
4	7	5.69	21.21
TL	33		

TABLE 5-4

T	#	% TL	% NO
1	23	18.70	46.94
2	11	8.94	22.45
3	9	7.32	18.37
4	6	4.88	12.24
TL	49		

## KEY

T = TYPE  
 # = NUMBER  
 % TL = PERCENT OF TOTAL  
 % YES = PERCENT OF YES  
 % NO = PERCENT OF NO

TL = TOTAL  
 1 = TYPE 1 -SINGLE COURSE  
 2 = TYPE 2 -INFUSION MODEL  
 3 = TYPE 3 -NO COURSEWORK  
 4 = TYPE 4 -TOTAL PROGRAM  
 (COMB. TYPE 1 & 2)

(Percentages rounded to nearest hundredth)

TABLE 5-5

TYPE	NUMBER	% OF TOTAL	% UNSURE
1	18	43.90	14.63
2	6	14.63	4.88
3	5	12.20	4.07
4	12	29.27	3.25
TTL	(41)		

(Percentages rounded to nearest hundredth)

## KEY

TYPE 1 = Single Course

TYPE 2 = Infusion Model

TYPE 3 = No Coursework

TYPE 4 = Total Program (Combination of Types 1 & 2)

TTL = Total

Nineteen respondents had no opinion, while seventy-four responded 'yes' and thirty responded 'no'. Again, the largest numbers identified occurred when matched answers occurred. There were nineteen all 'yes' in Type 1, compared to only three 'no' in Type 1. The same match of answers, applied to Type 2 (infusion model) resulted in four all 'yes' and only two all 'no' responses pertaining to Questions 3, 4, and 5.

TYPE OF PROGRAM	Q. 3	Q. 4	Q. 5	TOTAL
1	Y	Y	Y	19
1	Y	Y	N	3
1	Y	N	N	1
1	Y	N	Y	1
1	Y	U	Y	1
1	Y	U	U	1
1	N	N	N	3
1	N	N	Y	8
1	N	Y	Y	3
1	N	Y	N	2
1	N	Y	U	1
1	N	U	U	2
1	N	U	Y	3
1	N	U	N	2
1	U	U	Y	2
1	U	N	N	1
1	U	N	U	1
1	U	Y	Y	5
1	U	Y	U	2
				61
2	Y	Y	Y	4
2	Y	Y	N	1
2	Y	Y	U	1
2	Y	U	Y	2

TABLE 3/4/5

2	N	N	N	2
2	N	N	Y	2
2	N	Y	Y	1
2	N	Y	Y	1
2	N	Y	U	1
2	N	U	N	2
2	N	U	Y	2
2	U	U	U	1
				19
3	Y	N	Y	2
3	N	N	N	7
3	N	N	Y	5
3	N	N	U	1
3	U	U	U	1
3	U	U	Y	1
3	U	U	N	1
				18
4	Y	Y	Y	7
4	Y	Y	N	1
4	Y	N	Y	1
4	Y	Y	U	2
4	Y	U	U	4
4	Y	U	N	3
4	Y	U	Y	1
4	N	Y	Y	2
4	N	Y	U	1
4	U	Y	Y	3
				25

## KEY

TYPE 1 = Single Course

TYPE 2 = Infusion Model

TYPE 3 = No Coursework

TYPE 4 = Total Program (Combination of Types 1 & 2)

Y = YES

N = NO

U = UNSURE



Question 5 completed the comparison of Questions 3, 4, and 5 and created the greatest diversity of answers. The patterns established in 3 and 4 changed because of the answers in 5. There appeared to be a clear preference for the Type 1 model with respect to these three questions about the applicability of the information obtained for use with handicapped students in the mainstream classroom.

An examination of responses to Questions 3 and 6 compares the connection between sufficiency of information and the ability to find commercially prepared materials. The largest group answered no to both questions, while those who felt information was sufficient ('yes' to Question 3) split almost evenly in their feelings of adequacy in finding commercially prepared materials. The difference in feelings of adequacy ('yes' or 'no' to Question 6) was more dramatic for those who did not feel information was sufficient ('no' to Question 3), with thirteen expressing feelings of adequacy and twenty-five stating they did not feel able to find commercially prepared materials. (Table 3/6).

TABLE 3/6

Q.	Q.	NUMBER
3	6	
Y	Y	17
Y	N	18
N	Y	13
N	N	25

## KEY

Y = "YES"

N = "NO"

Of those who felt they received sufficient information in their preservice training, about one-half felt that they were able to find commercially produced materials for use with handicapped students. Of those who felt they did not receive sufficient information in preservice training (thirty-eight total), 34% felt that commercially produced materials were available, and 66% felt that commercially produced materials were unavailable. (TABLE 3/6).

## QUESTION 6

QUESTION 6: I am able to find commercially produced materials which can be used with handicapped students. (If yes, please share).

The availability of commercially produced materials which may be helpful in the classroom resulted in the largest (40%) negative group of responses in the entire questionnaire.

Only thirty-three (26%) felt that there were commercially produced materials available. One-third (forty-one) of the respondents had no opinion. The size of the total number of individuals responding 'no' or 'unsure' speaks directly to the teacher training programs. The combined number (67%) represents a large proportion of practitioners who do not know about acquiring special materials as needed for the handicapped child.

TABLE 6-1

R	#	%
Y	33	26.83
N	49	39.83
U	41	33.33
TTL	123	99.99

TABLE 6-2

T	#	% TTL	% Y
1	20	16.26	60.60
2	2	1.62	6.06
3	4	3.25	9.09
4	7	5.69	21.21
TTL	33	26.82	96.96

KEY

R = RESPONSE  
 # = NUMBER  
 % = PERCENT (AGE)  
 Y = YES  
 N = NO  
 U = UNSURE

TTL = TOTAL  
 T = TYPE  
 1 = TYPE 1-SINGLE COURSE  
 2 = TYPE 2-INFUSION MODEL  
 3 = TYPE 3-NO COURSEWORK  
 4 = TYPE 4-TOTAL PROGRAM  
 (COMB. TYPE 1 & 2)

TABLE 6-3

NO RESPONSES--ANALYSIS

TYPE	#	% TTL	% NO
1	23	18.69	46.94
2	11	8.94	22.45
3	9	7.31	18.37
4	6	4.87	12.25
TTL	49	39.81	100.01

TABLE 6-4

UNSURE RESPONSES--ANALYSIS

T	#	% TTL	% UN
1	18	14.63	43.90
2	6	4.87	14.63
3	5	4.06	12.19
4	12	9.75	33.31
TTL	41	26.81	99.98

KEY

- 1 = TYPE 1--SINGLE COURSE
- 2 = TYPE 2--INFUSION MODEL
- 3 = TYPE 3--NO COURSEWORK
- 4 = TYPE 4--TOTAL PROGRAM (COMB. OF TYPE 1 & 2)
- T = TYPE
- UN = UNSURE
- # = NUMBER
- % TTL = PERCENT OF TOTAL
- % NO = PERCENT OF NO RESPONSES
- % UNSURE = PERCENT--UNSURE RESPONSES
- TTL = TOTAL

TABLE 5/6

Q.	Q.	TOTAL
5	6	
Y	Y	17
Y	N	18
N	Y	13
N	N	25

KEY

- Y = "YES"
- N = "NO"

## QUESTION SEVEN

QUESTION 7: The mainstreamed students can be taught in my classroom with the modification techniques I learned in my training.

Question 7 was an attempt to examine whether the teachers could teach the handicapped in their classroom because of training received through their degree program. Seventy-one of the one hundred twenty-three felt that they could teach the handicapped students compared to only twenty-eight who felt they could not. Of those who felt positive, forty had received their training in a Type 1 program and a total of fifty-four in a combined Type 1 and Type 4 program. Twelve felt they had received enough training through an infusion model (Type 2), while three felt they could teach the handicapped students in their classroom even though they had no recognized training.

TABLE 7-1

"YES" RESPONSES

TYPE	NUMBER
1	40
2	12
3	5
4	14
TOTAL	71

KEY

TYPE 1 = Single Course

TYPE 2 = Infusion Model

TYPE 3 = No Coursework

TYPE 4 = Total Program (Combination of Types 1 & 2)

TABLE 7-2

NO RESPONSES

TYPE	NUMBER
1	11
2	4
3	10
4	3
TTL	28

TABLE 7-3

UNSURE RESPONSES

TYPE	NUMBER
1	10
2	3
3	3
4	8
TTL	24

KEY

TTL = TOTAL

1 = TYPE 1--SINGLE COURSE

2 = TYPE 2--INFUSION MODEL

3 = TYPE 3--NO COURSEWORK

4 = TYPE 4--TOTAL PROGRAM (COMBINED TYPE 1 & 2)

## QUESTION EIGHT

QUESTION 8: I feel that handicapped students can benefit from the practice of mainstreaming as long as the teacher has been appropriately trained.

Question 8 was included to determine the feelings of practitioners about handicapped students in their mainstream classrooms. One hundred seven (86.99%) of the respondents felt the concept of mainstreaming was a positive one, and 3.25% felt it was negative. Of the negative responses, three individuals received their training through a Type 1 program. The other individuals had no training program, therefore received no training. (TABLE 8).

TABLE 8

RESPONSE	NUMBER	PERCENTAGE
YES	107	86.99
NO	4	3.25
UNSURE	12	9.76
TOTAL	123	100

## QUESTIONS NINE & TEN

QUESTION 9: I feel the most effective teacher training for dealing with the mainstreamed handicapped is to have a specific course on the handicapped student's needs.

QUESTION 10: I feel the most effective teacher training for dealing with the mainstreamed handicapped is to incorporate the methods and needs into all regular methods courses taken during teacher training.

When the teachers were asked to identify the type of program that they would prefer for training teachers, a clear preference was demonstrated for the Type 1 model, with sixty-seven choosing a single class approach. (TABLE 9). Thirty-nine respondents marked 'yes' to both Questions 9 and 10 which resulted in one hundred six (86%) preferring one course and a combined approach. Seventy-nine preferred the infusion model, (TABLE 10) but only twenty-nine chose the infusion model exclusively by checking Question 9 with a 'no' or an 'unsure'. (TABLE 9-1). Clearly, the preference is for the combined approach of one course plus an infusion of information into all other courses. The key factor here appears to be a total program: course(s) plus infusion.



TABLE 9

T	Y	N	U	TTL
1	35	15	12	62
2	11	5	3	19
3	7	4	7	18
4	14	3	7	24
TTL	67	27	29	123

TABLE 10

T	Y	N	U	TTL
1	43	12	6	61
2	10	4	5	19
3	10	2	6	18
4	16	5	4	25
TTL	79	23	21	123

## KEY

TTL = TOTAL

1 = TYPE 1--SINGLE COURSE

2 = TYPE 2--INFUSION MODEL

3 = TYPE 3--NO COURSEWORK

4 = TYPE 4--TOTAL PROGRAM (COMBINED TYPE 1 &amp; 2)

T = TYPE

Y = YES

N = NO

U = UNSURE

TABLE 9-1

TOTAL GROUP OF  
RESPONSES

R	#
Y	67
N	27
U	29
TTL	123

TABLE 9-2

YES RESPONSES  
ONLY

T	#
1	35
2	11
3	7
4	14
TTL	67

TABLE 9-3

NO RESPONSES  
ONLY

T	#
1	15
2	5
3	4
4	3
TTL	27

## KEY

R = RESPONSE

# = NUMBER

T = TYPE

Y = YES

N = NO

U = UNSURE

TTL = TOTAL

1 = TYPE 1--SINGLE COURSE

2 = TYPE 2--INFUSION MODEL

3 = TYPE 3--NO COURSEWORK

4 = TYPE 4--TOTAL PROGRAM (COMBINED TYPE 1 &amp; 2)

TABLE 9-4

UNSURE  
RESPONSES  
ONLY

T	#
1	12
2	3
3	7
4	7
TTL	29

TABLE 10-1

BOTH  
NEEDED

R	#
Y	39
N	20
U	8
TTL	67

TABLE 10-2

NO  
RESPONSES

R	#
Y	24
N	2
U	1
TTL	27

KEY

T = TYPE  
# = NUMBER  
R = RESPONSE  
Y = YES  
N = NO  
U = UNSURE

1 = TYPE  
2 = TYPE  
3 = TYPE  
4 = TYPE

1--SINGLE COURSE  
2--INFUSION MODEL  
3--NO COURSEWORK  
4--TOTAL PROGRAM  
(COMBINED TYPE  
1 & 2) TTL = TOTAL

TABLE 10-3

R	#
Y	15
N	1
U	13
TTL	29

TABLE 10-4

T	#
1	43
2	10
3	10
4	16
TTL	79

TABLE 10-5

T	#
1	12
2	4
3	2
4	5
TTL	23

## KEY

R = RESPONSE  
 # = NUMBER  
 T = TYPE  
 Y = YES  
 N = NO  
 U = UNSURE

1 = TYPE 1--SINGLE COURSE  
 2 = TYPE 2--INFUSION MODEL  
 3 = TYPE 3--NO COURSEWORK  
 4 = TYPE 4--TOTAL PROGRAM  
 (COMBINED  
 TYPE 1 & 2)

TTL = TOTAL

TABLE 10-6

## "UNSURE" RESPONSES BY TYPE

TYPE	NUMBER
1	6
2	5
3	6
4	4
TOTAL	21

## KEY

TYPE 1 = Single Course  
 TYPE 2 = Infusion Model  
 TYPE 3 = No Coursework  
 TYPE 4 = Total Program (Combination of Types 1 & 2)

TABLE 9/10

SINGLE COURSE	INFUSION MODEL	TOTAL	PREFERRED MODEL
Q. 9	Q. 10		
YES	YES	39	TOTAL
YES	NO	20	SINGLE CS
YES	UNSURE	8	SINGLE CS
NO	YES	24	INFUSION
NO	NO	2	NEITHER
NO	UNSURE	1	NEITHER
UNSURE	YES	5	INFUSION
UNSURE	NO	1	NO
UNSURE	UNSURE	13	NO

KEY                    PREFERRED MODEL

TOTAL                = COMBINED TYPE 1 & 2

SINGLE CS            = TYPE 1

NEITHER             = TYPE 3

INFUSION            = TYPE 2

NO                    = No Class Taken

## QUESTION ELEVEN

QUESTION 11: I would recommend that teachers who have not had this type of coursework, be offered inservice training on the topic.

There was strong support for inservicing practicing teachers who graduated prior to HB 150's enactment. One hundred ten (89.43%) responded 'yes', while only three (2.44%) responded 'no'. Ten respondents were 'unsure', representing the remaining 8.13% of the total group. (TABLE 11).

TABLE 11

RESPONSE	NUMBER	PERCENTAGE
YES	110	89.43
NO	3	2.44
UNSURE	10	8.13
TOTAL	123	100

## QUESTION TWELVE

QUESTION 12: To assist me when I have mainstreamed handicapped students, I have a special education consultant available to me. (How frequently can you access this person? \_\_\_\_\_)

An additional 58.5% of the respondents felt they received some type of support from a special education consultant, while 30% felt no particular support system was available to them. (TABLE 12).

TABLE 12

RESPONSE	NUMBER	PERCENTAGE
YES	72	58.54
NO	37	30.08
UNSURE	14	11.38
TOTAL	123	100

QUESTION THIRTEEN

QUESTION 13: I feel it important to have the principal's support and guidance when I have a handicapped student in my classroom.

One other area receiving strong respondent support was the importance of administrative support. 92.68% of the respondents felt building principal support when working with handicapped students was essential. (TABLE 13).

TABLE 13

RESPONSE	NUMBER	PERCENTAGE
YES	114	92.68
NO	3	2.44
UNSURE	6	4.88
TOTAL	123	100



## QUESTION FOURTEEN

QUESTION 14: I can gain much support from my fellow teachers on techniques and materials to use with mainstreamed handicapped students.

A similar percentage (59.34%) felt they gained support from their peer group, fellow teachers. Only 20.33% did not feel such peer support and assistance.

TABLE 14

RESPONSE	NUMBER	PERCENTAGE
YES	73	59.34
NO	25	20.33
UNSURE	25	20.33
TOTAL	123	100

Chapter 5 presents and analyzes the data generated by the study.

## CHAPTER V

### CONCLUSIONS AND IMPLICATIONS

#### DISCUSSION OF FINDINGS

Hypothesis one was not confirmed. Instead, teacher respondents preferred an unpredicted form of training program which they suggested through comments, and by marking both the separate course choice and the infusion choice. Teachers stated that they wanted a separate course for basic information and the methods infused into other courses.

Hypothesis two was not confirmed either. Colleges and universities preferred the separate course as the first priority, but also identified the total program as the one type of approach which offered the greatest amount of information.

Hypothesis three was confirmed. Approximately 58% of the teacher respondents (to Question 7) indicated that they were prepared to plan and program for mildly to moderately handicapped students mainstreamed into their classrooms.

The results of this one study point toward a positive attitude change by teachers. They are more aware of the concept of teaching handicapped students. What appears to be coming from many of the responses is that the amount of

information needed to work with handicapped students is too great to be covered in a single course. Instead, the information about handicapped students needs to be an integral part of most of the teacher training program.

Through the regulation 'least restrictive placement' of PL 94-142, and the entire mainstream movement, the handicapped student is going to be part of nearly every school and many classrooms. Practicing teachers state that they must be trained effectively to do their job successfully for handicapped children. The majority of practitioners surveyed felt they could accommodate a handicapped child in their classroom because of the information they received during their training program. It is also clear that the newly graduated teachers who have been affected by HB 150 feel that their fellow teachers who missed this opportunity would benefit from such inservice training. This represents a definite message that teachers recognize the need for some specialized training to effectively cope with the demands of a handicapped student mainstreamed into their classroom. There appears to be a slight overall preference for having a single course identifying the needs of handicapped students and providing methods for dealing with these needs as opposed to the infusion model alone. It is clear, however, that the first choice of most teachers would be a combined program for teacher training. This consists of having one or more specific courses and information covered, as appropriate, in other courses.

## SIGNIFICANCE:

The results of this survey clearly support the intent of HB 150 as it was conceived, written, and ultimately passed in Illinois. Its' designers and everyone who worked for its passage were correct in their thinking that such training was a must for the contemporary teacher. Such training must be expanded to involve teachers who have missed this training opportunity.

The findings give strong support to HB 150 and should also offer specific insight into the most effective means of delivering the information to the prospective teachers. Clearly, a combined approach is recommended. This may well involve some reevaluation of course content in areas other than specifically special education. This will include the methods classes taken by all teachers. The findings also offer support for the need for much more than a single course simply because of the quantity of material and information available for consumption.

A third significant finding addresses the (seemingly limited) availability of materials useful with handicapped students, or at least the limited knowledge of what is available. Perhaps more class time needs to be devoted to the materials which are available, or to the ways of adapting existing materials.

Any future study needs to address a specific weakness in the current one. Of specific use would be a comparison study

of teacher attitudes before the passage of Illinois House Bill 150 and the attitudes of teachers after its passage.

An added factor which may prove useful in a future study would be the inclusion of research on adult learning styles and effective preservice programs which have been used for teachers of adult learners.

In an attempt to lessen the inherent weaknesses of questionnaires, future studies of this type would be improved with the inclusion of some personal interviews with teachers.

There is a clear need to replicate this type of study in the future to determine how programs have improved over the next several years as programs are 'fine-tuned'. Hopefully, some programs will alter their approaches because of these findings, and a later survey might demonstrate improvements resulting from these changes.

The future of education for handicapped as well as non-handicapped children will take place in or near the regular classroom. Integration of handicapped students with regular non-handicapped children is not a plan for the future, but contemporary reality. Teachers in the future will face wide levels of achievement from many varied groups of learners: multicultural, slow learners, gifted and talented, as well as any number of various handicaps. The teachers must be prepared to meet these unique demands. One of the assets for those being trained in Illinois is HB 150. Illinois House Bill 150 is only one of the many needed aides teachers of the future will need. It is a beginning.

## REFERENCES

- Abeson, A., & Zettel, J. (1977, October). The End of the Quiet Revolution: The Education of All Handicapped Children Act of 1975. Exceptional Children, 44(2), 114-127.
- Ballard, J., & Zettel, J. (1977, November). Public Law 94-142 and Section 504: What They Say About Rights and Protection. Exceptional Children, 44(3), 177-185.
- Becker, R. L., (1962, February). Personal On-site Visit, Lincoln State School, Lincoln, IL.
- Becker, R. L., (1972-1975). Learning Disabilities Consultant, Ford-Iroquois County Special Education Assn., Elliott, IL.
- Bensky, J., Shaw, S., Gouse, A., Bates, H., Dixon, B., & Beans, W. (1980, September). Public Law 94-142 and Stress: A Problem for Educators. Exceptional Children, 47(1), 24-29.
- Bentz, S., (August 11, 1985). Telephone interview.
- Bogdan, R. (1983, February). 'Does Mainstreaming Work?' Is A Silly Question. Phi Delta Kappan, 64, 427-28.
- Brenton, M. (1974, March-April). Mainstreaming the Handicapped. Today's Education, 63(2), 20-25.
- Cantrell, R. P., and Cantrell, M. L. (1976, April). Preventive Mainstreaming: Impact of a Supportive Services Program on Pupils. Exceptional Children, 42, 381-386.
- Clarkson, M. C. (1982). Mainstreaming the Exceptional Child: A Bibliography. San Antonio: Trinity University Press.

- Coleman, M. C., and Gilliam, J. E. (1983, Summer).  
Disturbing Behaviors in the Classroom: A Survey of Teacher Attitudes. Journal of Special Education, 17(2), 122-129.
- Custer, J. D., and Osguthorpe, R. T. (1983, October).  
Improving Social Acceptance by Training Handicapped Students to Tutor Their Nonhandicapped Peers. Exceptional Children, 50, 173.
- Dodd, M. (undated publication). Current Trends in Special Education as a Result of Parent-Professional Cooperation. Chicago: Illinois Association for Citizens with Learning Disabilities, Inc.
- Dodd, M., (June 3, 1985). Personal Interview.
- Dokecki, P. (ed.) (1983, Summer) Regulation and Schools: The Implementation of Equal Education for Handicapped Children. Peabody Journal of Education, 60(4), 55-77.
- Freeman, M. A., and Becker, R. L. (1979, Winter)  
An Analysis of Teacher Perceptions: Competencies for Teachers of Learning Disabled Children and Youth. Learning Disability Quarterly, 50, 70-79.
- Glazzard, P. (1980, Fall). Adaptations for Mainstreaming. Teaching Exceptional Children, 3(1), 26-29.
- Glover, J. A., and Gary, A. L. (1976). Mainstreaming Exceptional Children. Pacific Grove, CA: Boxwood Press.
- Hagerty, R., and Howard, T. (1978). How to Make Federal Mandatory Special Education Work for You. Springfield, Illinois: Charles C. Thomas.
- Haglund, E., and Stevens, V. L. (1980). A Resource Guide for Mainstreaming. Springfield, Illinois: Charles C. Thomas.

- Hanline, M. F., and Murray, C. (1984, December). Integrating Severely Handicapped Children into Regular Public Schools. Phi Delta Kappan, 66, 273-76.
- Israelson, J. (1980, Fall). I'm Special Too--A Classroom Program Promotes Understanding and Acceptance of Handicaps. Teaching Exceptional Children, 3(1), 35-37.
- Ivarie, J., Hogue, D., and Brulle, A. (1984, October). An Investigation of Mainstream Teacher Time Spent With Students Labeled Learning Disabled. Exceptional Children, 51, 142-49.
- Leyser, Y., and Abrams, P. D. (1984, February). Changing Attitudes of Classroom Teachers toward Mainstreaming Through In-service Training. The Clearing House, 57, 250-55.
- Nadler, B., Merron, M., & Friedel, W. (1981, March). Public Law 94-142: One Response to the Personnel Development Mandate. Exceptional Children, 47(6), 463-464.
- Poorman, C. (1980, Summer). Mainstreaming In Reverse With A Special Friend. Teaching Exceptional Children, 12 (4), 136-142.
- Rider, R. (1980, Summer). Mainstreaming Moderately Retarded Children in the Elementary Physical Education Program. Teaching Exceptional Children, 12(4), 150-152.
- Robinson, D. (1982, November). The IEP: Meaningful Individualized Education in Utah. Phi Delta Kappan, 64, 205-06.
- Salend, S. J. (1984, February). Factors Contributing to the Development of Successful Mainstreaming Programs. Exceptional Children, 50, 409-16.
- Slovin, R. E., and Madden, N. A. (1983, Summer). Effects of Cooperative Learning on the Social Acceptance of Mainstreamed Academically Handicapped Students. Journal of Special Education, 17(2), 172-182.



Snyder, L., Apolloni, T., & Cooke, T. (1977, February).  
Integrated Settings at the Early Childhood Level: The Role  
of Nonretarded Peers. Exceptional Children, 43(5),  
262-266.

Stainback, W., and Stainback, S. (1984, October). A  
Rationale for the Merger of Special and Regular Education.  
Exceptional Children, 51, 102-11.

Zemanek, D., & Lehrer, B. (1977, March). The Role of  
University Departments of Special Education in  
Mainstreaming. Exceptional Children, 43(6), 377-379.

## OTHER RESOURCES

- Cross, K. P. (1976) Accent on Learning. San Francisco: Jossey-Bass Publishers.
- Cross, K. P. (1981) Adults As Learners. San Francisco: Jossey-Bass Publishers.
- Houle, C. O. (1961) The Inquiring Mind. Madison, WI: University of Wisconsin Press.
- Kidd, J. R. (1973). How Adults Learn. New York: Association Press.
- Knowles, M. (1978) The Adult Learner: A Neglected Species. Houston: Gulf Publishing Company.
- Knox, A. B. (1978) Adult Development and Learning. San Francisco: Jossey-Bass Publishers.
- Long, H. B., and Ulmer, C. (1972) The Physiology of Aging: How It Affects Learning. Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Miller, H. L. (1964) Teaching and Learning in Adult Education. New York: The MacMillan Company.
- Tough, A. (1979) The Adult's Learning Projects. Austin, TX: Learning Concepts.
- Verduin, J. R., Miller, H. G., and Greer, C. (1977) Adults Teaching Adults. Austin, TX: Learning Concepts, Inc.

## APPENDICES

## APPENDIX A

### SELECTED KEY DATES AND EVENTS IN THE DEVELOPMENT OF PUBLIC EDUCATION IN THE UNITED STATES, 1776-1980

- 1776 The 13 states unanimously declared their independence and their joint commitment to "life, liberty and the pursuit of happiness."
- 1779 Thomas Jefferson's School Bill for Virginia; First state school system proposal.
- 1791 Passage of Tenth Amendment to the United States Constitution reserves education to the states.
- 1817 First educational program for exceptional children and youth formally established in the United States--American Asylum for the Education and Instruction of the Deaf (now American School for the Deaf), Hartford, Connecticut.
- 1818 First grants of money paid by the federal government to states.
- 1821 English high school for boys organized in Boston.
- 1823 United States' first normal school for teachers privately established in Vermont.
- 1826 First nursery school of the nation opened in New Harmony, Indiana.
- Bowdoin College first in United States to award a degree to a Black person, John Russwurm.
- 1829 Massachusetts passes first state high school law.
- First residential school for blind pupils in the United States incorporated in Watertown, Massachusetts; initially called the New England Asylum for the Blind, now the Perkins School for the Blind.
- 1839 State supported normal school for teacher training started at Lexington, Massachusetts.
- 1840 Rhode Island passed first state compulsory education law.
- 1845 First statewide associations of teachers founded in New York and Rhode Island.

- 1848 Eduard Seguin came from France to describe his educational procedures there with mentally retarded pupils and to urge the establishment of schools for mentally retarded children and youth in the United States.
- Dorothea Dix confronted the Congress with the inhumanity of many programs for the "mentally ill."
- 1852 Massachusetts passed the second compulsory school attendance law.
- 1855 The United States' first kindergarten established at Watertown, Wisconsin.
- 1857 National Education Association formed, initially called the National Teachers' Association.
- 1859 Nation's first residential school for persons with mental retardation started in South Boston under the name Massachusetts School for Idiotic and Feeble-Minded Youth. Samuel Gridley Howe, then head of the Perkins School for the Blind, was most influential in enlisting legislative and public support for this new facility.
- 1867 Congress created a National Department of Education, later to become the United States Office of Education, now under the Secretary of Health, Education, and Welfare.
- 1869 First day classes for any exceptional children were begun for deaf pupils in Boston, Massachusetts.
- 1873 Nation's first permanent public kindergarten initiated by the St. Louis, Missouri, public schools.
- 1878 Day classes for mentally retarded pupils proposed by August Schenck of Detroit in a speech before the American Teachers Association.
- 1891 Teacher training launched at Gallaudet College in the area of Deaf Education.
- 1893 Committee of Ten report promulgated, the initial report of a series on curriculum from the National Education Association.
- 1895 United States educators with management responsibilities formed the American Association of School Administrators.
- 1896 First public school day classes for mentally retarded pupils initiated in Providence, Rhode Island.

- 1898 Congress of Mothers organized; now called National Congress of Parents and Teachers.
- 1899 First public school day classes for crippled children and youth started in Chicago, Illinois.
- 1900 First public school day classes for blind pupils begun in Chicago, Illinois.
- Two states, Wisconsin and Michigan, authorized subsidies to expand classes for deaf pupils in local public schools, the first such state financial support for excess educational cost for any exceptional children and youth.
- 1904 Vineland Training School started summer training sessions for teachers of the retarded.
- 1905 E. L. Thorndike conceptualized and planned a scale to measure educational achievement.
- 1906 Approximate time medical inspections were introduced in the schools for the detection and prevention of contagious infectious diseases.
- 1908 Establishment of first public school day classes for children with lowered vitality.
- 1908 Speech correction initiated in New York public school.
- 1909 First White House Conference on Children and Youth.
- National Education Association cites the Goddard translation and revision of the Binet-Simon Scale of Intelligence as a useful test with exceptional children and specifically with mentally retarded children.
- 1910 Nation's first public junior high schools opened in Berkeley, California and Columbus, Ohio.
- 1911 Countrywide survey by United States Bureau of Education found 6% of cities reporting special classes for gifted pupils.
- 1913 Roxbury, Massachusetts started first classes for partially seeing pupils.
- 1915 Laggards in Our Schools by Leonard P. Ayres was published; it became one of the first special education texts.

- 1916 Organization of American Federation of Teachers as an affiliate of the American Federation of Labor.
- Lewis Terman produced the Stanford-Binet Scale of Intelligence tests with an elaborate standardization and the inclusion of the intelligence quotient concept proposed by Stern in 1912.
- 1917 Federal support for vocational education furnished through Smith-Hughes Act.
- 1918 All states had legally effective compulsory education. The Seven Cardinal Principles of Secondary Education was published.
- 1920 First presidential proclamation of American Education Week.
- Federal Civilian Rehabilitation Act signed by President Woodrow Wilson.
- 1922 Founding year of The Council for Exceptional Children.
- 1923 World Confederation of Organizations of the Teaching Profession organized in San Francisco, California; original name was World Federation of Education Associations.
- 1926 First prototype of teaching machine and programmed instruction invented by Sidney Pressey at Ohio State University.
- 1930 In a national conference on child health and protection called by President Hoover one committee was assigned to study the needs of exceptional children.
- 1931 A section on exceptional children was formed in the United States Office of Education and a professional educator was named a Senior Specialist to head the unit.
- 1941 The National Society for the Study of Education devoted a yearbook to the education of exceptional children.
- 1944 Initial GI Bill for veterans' education passed by Congress.
- 1950 National Association for Retarded Citizens formed; other parent groups with focus on specific exceptional conditions also began to press for special education and other necessary services.

Thirty-four states had laws subsidizing public school classes for all recognized groups of exceptional children.

1952 Federal Communications Commission reserved more than 200 channels for noncommercial television, providing functional base for educational television.

1957 Cooperative Educational Research Program launched by the US Office of Education, with problems of the mentally retarded a priority concern.

1958 National Defense Education Act approved by Congress to improve instruction in sciences, mathematics, and languages.

Congress passed Public Law 85-926 to provide one million dollars to be allocated to colleges and to universities to train professional educators for special education of mentally retarded pupils.

1960 First book published on programmed instruction.

1961 Congress added funds to support preparation of teachers of deaf children and youth.

1963 Congress legislated funds to support training of educators for all recognized groups of handicapped children and youth and to subsidize research regarding their education.

1965 Elementary and Secondary Education Act provided major breakthrough in federal support of the schools, particularly for programs serving disadvantaged children and youth.

National Teacher Corps approved by Congress. Head Start made a year-round program. Elementary and Secondary Education Act authorized educational benefits directed mostly toward low income families.

1966 Regional educational research and development centers and laboratories established through the United States Office of Education.

Federal effort on behalf of handicapped pupils given added status, elevated to Bureau for the Education of the Handicapped in the Office of Education.

1967 Education Professions Development Act adopted by Congress.



- 1971 Special study of educational needs of gifted and talented pupils initiated by United States Commissioner of Education.
- 1972 Conclusions from legal actions in Pennsylvania and in the District of Columbia initiated a national move to open and improve education for all exceptional pupils within the context of regular education to the fullest extent possible and with guarantees of due process.
- 1973 Rehabilitation Act amendments guarantee rights of the handicapped in employment and in educational institutions that receive federal monies.
- 1974 US Supreme Court upheld right of non-English speaking students to bilingual compensatory education in English (Lou v. Nichols).
- 1975 Education of All Handicapped Children Act (Public Law 94-142) passed by the Congress and signed by President Gerald Ford.
- 1976 All states have laws subsidizing public school programs for exceptional children and youth.

The National Education Association and the American Federation of Teachers pass resolutions in support of teaching exceptional children in regular classes (mainstreaming) with appropriate support personnel and facilities.

Four states require by law all regular class teachers to have preparation to include exceptional pupils in their classes.

- 1978 Public Law 94-142 (The Education of All Handicapped Children Act) becomes effective, assuring all handicapped children a full public education and a variety of accompanying rights.
- 1980 Full educational opportunities for all exceptional children by this date set as goal by the United States Commissioner of Education.

## APPENDIX B

### SURVEY ON HOUSE BILL 150 IMPLEMENTATION

The method by which training institutions meet the requirements of HB 150 appears to take one of two positions. Some schools designed a separate course which was then required of all students in a teacher education curriculum. This will be called the 'course' model.

Other institutions chose to use an 'infusion' model, and the information on special education needs is incorporated into existing courses. This does not require the addition of a course to the program of the student.

Directions: Mark any and all of the answers which are appropriate to your situation. Not just one choice is allowed, but whichever is true for you.

A. For the 'infusion' model programs:

1. What percentage of the courses are devoted to discussing the needs of handicapped children?
  - a. 0 to 25%
  - b. 26 to 50%
  - c. 51 to 75%
  - d. 76 to 100%
  
2. Which courses include material and information on special education?
  - a. methods courses
  - b. practicum courses
  - c. all education courses
  - d. less than half of the education courses
  - e. more than half of the education courses
  - f. Other--please specify:
  
3. Who wrote the infusion curriculum?
  - a. a regular education instructor
  - b. curriculum committee
  - c. a special education instructor
  - d. a special education committee
  - e. an outside consultant
  - f. Other--please specify:
  
4. Are special education components evaluated as part of the course?
  - a. always
  - b. most often

- c. some
  - d. not at all
5. How effective in giving new information is this model?
- a. very effective
  - b. somewhat effective
  - c. basically ineffective
  - d. should not be used
6. Please offer any additional comments for the success or failure of your model which might assist me in this project.

B. For the separate 'course' model:

1. What is the contents of the course you offer?
- a. identification of handicapping conditions
  - b. methods for working with handicapping conditions
  - c. materials for working with handicapping conditions
  - d. curriculum modification procedures for existing materials
  - e. working with age groups:
    - K to 12
    - adolescent and adult populations
    - vocational programming
    - other--specify:
2. Are visits and observations of special education classes/programs part of the course requirements?
- a. yes
  - b. no
  - c. how many
3. Who designed the course?
- a. a regular education instructor
  - b. curriculum committee
  - c. a special education instructor
  - d. a special education committee
  - e. an outside consultant
  - f. Other--please specify:
4. How effective in giving new information is this model?
- a. very effective
  - b. somewhat effective
  - c. basically ineffective
  - d. should not be used
5. Please offer any additional comments for the success or failure of your course which might assist me in this project.

## APPENDIX C

Dear Teacher:

Enclosed with this letter you will find a questionnaire which is being taken as part of my dissertation work for my doctoral degree in curriculum and instruction. The purpose of the study is to identify how effectively the teacher trainers have met the requirements of HB 150 in Illinois. That bill required you to have some type of coursework addressing the needs of handicapped students. There are many ways in which training facilities meet the intent of the law, and I am attempting to identify which way is the most beneficial in offering useful information to its graduating teachers.

If you have now, or have had in the past few years, at least one mainstreamed handicapped student in your classroom, please complete and return the enclosed questionnaire. If you have not had this experience, please return the same questionnaire blank. This will assist me in computing the return percentage.

In either case, thank you for your time. Have an enjoyable summer break.

Randal L. Becker  
Doctoral Candidate

## TEACHER QUESTIONNAIRE

Dear Teacher: In order to help me complete the requirements for my dissertation, I am asking you to complete and return the following questionnaire. Your answers and identification will be kept confidential. If you would be interested in seeing the results of the survey, be sure to mark Number 20 below.

(Each question was to be marked "yes", "no", or "unsure" in a grid at the right.)

### DURING MY TEACHER TRAINING PROGRAM:

1. I had at least one specific course designed to teach me how to work with handicapped mainstreamed students.
2. Instead of having a specific course, I learned about the needs of handicapped students in all of my courses.
3. The information learned was sufficient.
4. I am now able to modify classroom lessons for the mainstreamed handicapped because of what I learned (1 or 2).
5. The information gathered during my teacher training is now directly applicable to my classroom.
6. I am able to find commercially produced materials which can be used with handicapped students. (If "yes", please share.)
7. The mainstreamed students can be taught in my classroom with the modification techniques I learned in my training.
8. I feel that handicapped students can benefit from the practice of mainstreaming as long as the teacher has been appropriately trained.
9. I feel the most effective teacher training for dealing with the mainstreamed handicapped is to have a specific course on the handicapped student's needs.

10. I feel the most effective teacher training for dealing with the mainstreamed handicapped is to incorporate the methods and needs into all regular methods courses taken during teacher training.
11. I would recommend that teachers who have not had this type of coursework, be offered inservice training on the topic.
12. To assist me when I have mainstreamed handicapped students, I have a special education consultant available to me. (How frequently can you access them?)
13. I feel it important to have the principal's support and guidance when I have a handicapped student in my classroom.
14. I can gain much support from my fellow teachers on techniques and materials to use with mainstreamed handicapped students.
15. I currently teach grade
16. I have a total class number of                      students.
17. I have taught for                      years.
18. My highest degree held is                      .
19. In the past five years, I have had a total of                      handicapped students in my class.
20. Please circle the number 20 if you would like a copy of these findings.

OVER PLEASE

REVERSE SIDE OF TEACHER QUESTIONNAIRE

MATERIALS AVAILABLE:

Please list any material, equipment, books, etc., which you have found to be effective with handicapped students mainstreamed into your classroom. List them according to the grade level, type of handicap used with, and the subject used for. This information will be compiled, and sent back to you as a thank you for assisting me in this study. Be sure to supply the information below so that I can mail the results and compilation back to you.  
Your Name:

Your School:

Address:

City:

State:

Zip:

College or University graduated from:

Year of Graduation:                      This was my first or second degree?

My age is: above 30                      or below 30

The racial/ethnic makeup of my class is: (mark the most appropriate statement).

a. all white; b. all nonwhite; c. mixed.

My school is: a. inner city; b. suburban; c. urban;  
d. large e. small

APPENDIX D

HOUSE BILL 150

In 1979, the General Assembly enacted a law requiring that individuals applying after September 1, 1981, for the early childhood, elementary, special, or high school certificate must complete coursework in specific areas concerning exceptional children.

Sec. 21-2a. Required curriculum for all teachers. After September 1, 1981, in addition to all other requirements, the successful completion of coursework which includes instruction on the psychology of the exceptional child, the identification of the exceptional child, including, but not limited to the learning disabled and methods of instruction for the exceptional child, including, but not limited to the learning disabled shall be a prerequisite to a person receiving any of the following certificates; early childhood, elementary, special and high school.



## APPENDIX E

### COLLEGES AND UNIVERSITIES SURVEYED IN INITIAL SURVEY

Augustana College

Bradley University

Chicago State University

DePaul University

Eastern Illinois University

Elmhurst College

Illinois State University

Loyola University of Chicago

MacMurray College

Mundelein College

National College of Education

Northeastern Illinois University

Northern Illinois University

Northwestern University

Roosevelt University

Rosary College

Saint Xavier College

Southern Illinois University--Edwardsville

University of Illinois at Chicago

University of Illinois at Urbana-Champaign

## INITIAL COLLEGE/UNIVERSITY SURVEY--RESULTS

- a. 6 schools use a combined approach (single course plus infusion into other courses).
- b. 4 schools use the infusion model only (Type 2).
- c. 9 schools use specific course(s) addressing teaching of handicapped children (Type 1).
- d. 1 school reports that it will change from infusion (Type 2) separate course (Type 1) this year.

APPROVAL SHEET

The dissertation submitted by Randal L. Becker has been read and approved by the following committee:

Dr. Barney Berlin, Director  
Professor, Education, Loyola

Dr. Kay Monroe Smith  
Professor, Education, Loyola

Dr. Steven I. Miller  
Professor, Education, Loyola

The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval by the Committee with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctor of Education.

4/11/86

Date

  
Director's Signature